

REMARKS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested. Claims 1-6, 8-23 and 26 are pending in the present application. Claims 7, 24 and 25 have been cancelled and Claims 1, 12, 18, 22 and 23 have been amended by the present amendment.

In the outstanding Office Action, the Information Disclosure Statement filed May 16, 2006 was objected to; the Oath or Declaration was objected to; Claims 12, 18 and 23 were objected to; Claims 1-4 were rejected under the 35 U.S.C. §102(b) (as anticipated by Ruscheweya '786; Claims 1, 5, 6, 9, 19, 22, 23 and 26 were rejected under 35 U.S.C. §102(b) as unpatentable over Ruscheweya '108; there were several rejections of the dependent claims under 35 U.S.C. §103(a); Claim 12 was rejected under 35 U.S.C. §103(a) as unpatentable over Ruscheweya '108 in view of Ruscheweya '786; Claim 18 was indicated as allowable if amended to correct a minor grammatical informality; Claim 25 was indicated as allowable if rewritten in independent form.

Applicants thank the Examiner for the indication of allowable subject matter. In light of this indication, Claim 22 has been amended to include the subject matter recited in dependent Claims 24 and 25. Accordingly, Claim 22 and each claim depending therefrom are allowable and the rejections noted in the Office Action regarding these claims are moot.

Claim 18 has been amended to correct a minor grammatical informality.

Accordingly, it is respectfully submitted that independent Claim 18 is also allowable.

Regarding the objection to the Information Disclosure Statement of May 16, 2006, enclosed is an updated PTO-SB08 form including the Chinese Office Action and the cited reference.

A copy of the cited reference and Chinese Office Action are not enclosed as they were previously filed. Accordingly, it is respectfully requested the Examiner consider the reference and English translation of the Chinese Office Action.

Regarding the objection to the Oath or Declaration, a supplemental Oath or Declaration was filed on July 31, 2007. Accordingly, it is respectfully requested this objection be withdrawn.

In addition, Claim 12 has been amended to correct a misspelling in the term "mechanism." Claim 23 has also been amended as suggested in the Office Action. Accordingly, it is respectfully requested that the objections to Claims 12 and 23 also be withdrawn.

Regarding the rejection of independent Claims 1 and 12, the Office Action relies on any one of Ruscheweya '786 and Ruscheweya '108. However, it is respectfully noted independent Claims 1 and 12 have been amended to clarify:

"...wherein the outlet is located adjacent to the joining point where the at least two fluid flows are joined together such that the fluid flow being discharged through the outlet swings while proceeding due to complex vortices caused by the at least two fluid flows being joined together at the joining point and so the fluid flow being discharged through the outlet is discharged to a wider space than a width of the outlet."

As noted in the present specification at page 2, lines 15-21, the present invention provides a flow spreading mechanism enabling the fluid discharge from an outlet to be diffused and the heat due to the flow of the fluid to be transferred even to the place where the fluid could not directly reach due to the limitation caused by the size or shape of the outlet or the deflection of a louver provided for the outlet. Also, a maximum fluid spreading effect is obtained by the flow generated by the interference between the two vortices and is swinging while preceding. (see page 7, lines 4-7).

It is respectfully noted Ruscheweya '786 and Ruscheweya '108 are not concerned with flow spreading mechanism that the fluid flow being discharged to the outlet is discharged to a wider space than a width of the outlet. Rather, fluid flows in Ruscheweya '786 and '108 is used to produce any impulses which occur in the main conduit transversely to the direction of the flow to form a discreet eddy system. (See Figure 1, in column 5, lines 3-21 of Ruscheweya '786).

As shown in each of the Figures of Ruscheweya '786 and Ruscheweya '108, at the outlet given by the imaginary lines in the Appendices A and B, the fluid flow is not bred, but rather is constricted by the electrode itself, which is discussed as being problematic in the background of the present invention. Therefore, Ruscheweya '786 and Ruscheweya '108 do not teach or suggest

the fluid flow being discharged to the outlet to a wider space in a width of the outlet as claimed by the present invention.

Accordingly, it is respectfully submitted independent Claims 1 and 12 and each of the claims depending therefrom are also allowable.

Further, it is respectfully submitted each of the rejections of the dependent claims have also been overcome as the claims rejected therein are dependent claims and because the additional references also do not teach or suggest the features recited in the currently amended independent Claims 1 and 12.

CONCLUSION

In view of the above remarks, it is believed that the claims clearly distinguish over the patents relied on by the Examiner, either alone or in combination.

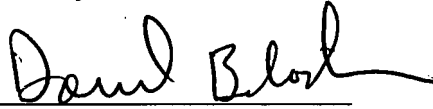
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact David A. Bilodeau at (703) 205-8072, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

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Enclosure: SB08 (with Chinese Office Action and cited reference)